

RESPONSE TO OFFICE ACTION DATED MARCH 13, 2006  
SERIAL NO 10/642,903

### REMARKS

Reconsideration of this application as amended is respectfully requested.

The specification has been amended to conform more closely to conventional U.S. practice. Filed herewith is a substitute abstract in which the phrases objected to by the examiner have been replaced with what is believed to be acceptable phraseology. Appropriate headings have also been added to the application. Corrections have also been made to the specification in page 4, paragraphs 3 and 5 to include the correct spelling of "alkali". Throughout the specification, "eg" and "ie" have been replaced with "e.g." and "i.e.". In page 5, paragraph (a), the last sentence has been canceled. It is believed that the specification is now in compliance and overcomes the objections noted by the examiner. No new matter has been added.

The Claims have been amended in such manner as to overcome the rejections under 35 USC § 112, second paragraph. No new matter has been added.

With regard to Claim 13, it is respectfully submitted that the usage of the term "theoretical density" is proper in that it is a term of art well-known to material scientists to indicate absolute 100% density of a particulate matter. Any given particulate matter has an absolute density which can be ascertained based on whatever material is being dealt with. The percent of theoretical density is thus also ascertainable and is commonly used in the materials art with regard to particulate matter. Accordingly, the rejection of Claim 13 under 35 USC § 112, second paragraph is believed to be improper and it is requested that the examiner reconsider and withdraw the rejection.

The rejection of Claim 16 as being unpatentable over Padget, et al. in view of Hansen, et al. and further in view of JP5180344 and Terai is respectfully traversed. Claim 16, as amended, recites a metal gasket assembly having at least one embossed sealing bead and a gasket coating applied to the at least one sealing bead. None of the prior art relied upon by the examiner teaches or suggests this combination of elements. In particular, the prior art fails to show the metal gasket assembly having the embossed sealing bead in combination with the coating applied to the bead. The coating serves as a sealing enhancer to the metallic beads which extrudes under pressure and fills any cracks

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or fissures in the elements being sealed or in the gasket to enhance the sealing capabilities of the metal bead. It is respectfully requested, therefore, that the examiner reconsider and withdraw the rejection of Claim 16.

Rejection of Claim 27 is also believed to be improper. Claim 27 recites a seal-enhancing coating. The coating disclosed in Padget is a corrosion or fire-resistant coating and of a different character than the sealing-enhancing coating of the present invention. The Padget coating is a rubbery resilient coating that is latex-based and thus will not extrude under pressure, as intended with the present claimed coating. The examiner points out a number of differences between the primary Padget reference and the claimed invention in paragraph 13 of the rejection. With regard to the combination recited in Claim 27, the examiner concedes that Padget fails to disclose the presence of an inorganic binder and an organic binder that is heat resistant to at least 300° Celsius.

The examiner looks to Hansen to make up for the deficiency of the lack of supplementary inorganic binder. However, the Hansen reference is directed to polystyrene and has nothing to do with coatings. It is respectfully submitted that one skilled in the art of coatings would not look to Hansen, which is in an entirely different field, for guidance on what to add to the composition of Padget, in particular adding an inorganic binder, since there is no indication that this would or could be used with Padget without including the polystyrene chemistry of Hansen. Moreover, there is nothing to say that the addition of the supplementary inorganic binder, even if it could be made, would enhance the corrosion protection and/or fire protection characteristics of the latex-based Padget coating, even if the combination could be made. It would seem that there would have to be a deficiency in the Padget coating for one skilled in the art to look to any secondary reference for teachings and it does not appear from the teachings that Padget alone or in combination with Hansen recognizes such a deficiency and a solution as outlined by the examiner.

As for the requirement that the high temperature organic binder be heat resistant to at least 300° Celsius, the examiner looks to the Japanese reference JP '344. However, this reference teaches a thick rubber based coating, and thus would not be appropriate for seal-enhancing coatings recited in Claim 27. Moreover, such a combination would require a complete change in the character of the Padget coating from latex to some other

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material and it is unclear why one skilled in the art would make the suggested combination when such would seem to alter the basic character of the principal reference and its corresponding objectives. It is respectfully submitted, therefore, that the rejection of Claims 27 is improper and it is requested that the examiner reconsider and withdraw the rejection.

Newly submitted Claim 35 is directed to a method of forming a metal gasket which includes preparing at least one metal gasket sheet having at least one opening for conveying of fluid and at least one embossment in the sheet defining a sealing ridge around the at least one opening operative to press against opposing members to be sealed to provide a primary seal around the at least one opening. A seal-enhancing coating is applied to the at least one metal gasket sheet such that the coating extends over the sealing ridge of the at least one embossment to improve the sealing characteristics of the at least one embossment by filling small cracks or fissures in the surface of the gasket and/or the member against which the gasket seals in operation. The seal-enhancing coating is one prepared from a mixture of chemically exfoliated vermiculite in which at least 90% of the vermiculite has a thickness of less than or equal to 30 microns and no dimension is greater than one millimeter, a high temperature organic binder that is heat resistant to at least 300° Celsius, a supplementary inorganic binder, and a flaky filler.

Neither Padget alone or in combination with the cited secondary references teaches or suggests such a method, and it is respectfully submitted, therefore, that Claim 35 distinguishes applicant's invention patentably over the prior art of record and should be allowed.

The remaining Claims depend, ultimately, on Claims 16 or 27 and are believed allowable for the same reasons as their parent claims. The dependant Claims distinguish over one another and their parent by reciting applicant's invention in greater detail.

It is respectfully submitted that this application now is in condition for allowance. Further and favorable action is requested.

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Respectfully submitted,

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April 17, 2006

Date

  
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**CERTIFICATE OF MAILING**

I hereby certify that this Amendment is being deposited with the United States Postal Service via facsimile 571-273-8300 addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on April 17, 2006.

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